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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,500	11/19/2003	Jim E. Leone	MICRU-65282	8234

24201 7590 02/26/2007

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EXAMINER	
MENDOZA, MICHAEL G	
ART UNIT	**PAPER NUMBER**
3734	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/718,500	LEONE ET AL.	
	Examiner	Art Unit	
	Michael G. Mendoza	3734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-55* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-35,37 and 39-55* is/are rejected.

7)☒ Claim(s) *37 and 38* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 November 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *4/19/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the reinforcement member is formed of a ribbon and wherein the reinforcement portion is formed of a tapered wire must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

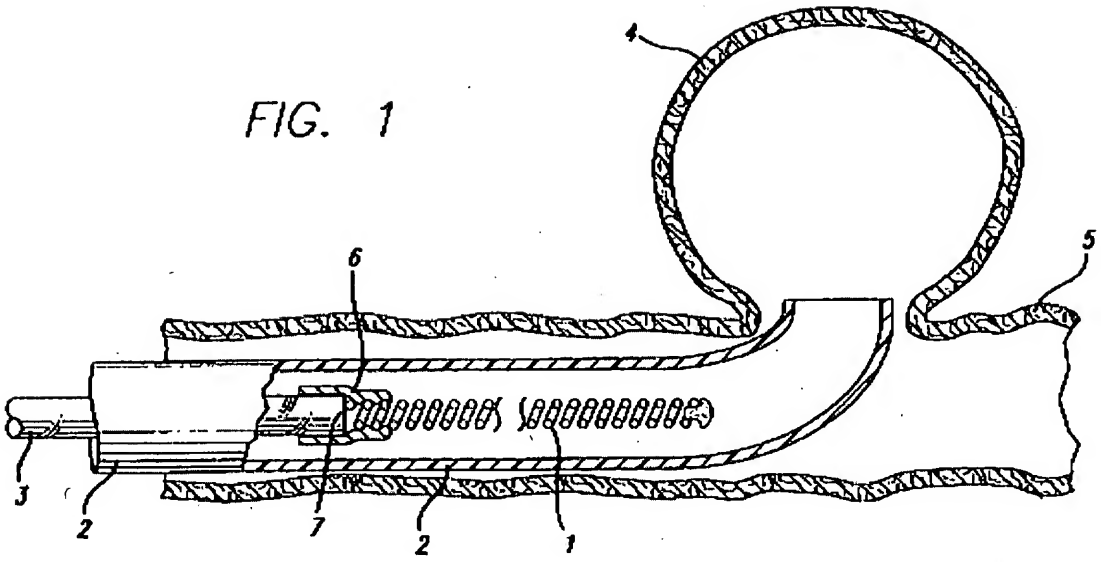
3. Claims 1-30 and 40-55 are rejected under 35 U.S.C. 102(b) as being anticipated by Ferrera et al. 6171326.

4. Ferrera et al. teach a vasoocclusive device comprising: at least one strand of a flexible material formed to have a first inoperable, substantially linear configuration for insertion into and through a catheter to a desired portion of the vasculature to be treated, and a second operable configuration for framing or occluding the desired part of the vasculature to be treated, said operable configuration including a first portion configured to frame or occlude a part of the vasculature to be treated and a second non linear portion configured to engage an artery wall for securing the occluding device in the artery system of the vasculature; wherein the portion for securing the occluding device in an artery system of the vasculature comprises an anchor portion of the second operable configuration to secure the occluding portion of the device in the artery system of the vasculature; wherein the anchor portion comprises a plurality of extending loops along a longitudinal axis to thereby provide contact surface area for anchoring the occluding portion of the device in the artery system of the vasculature; a second portion having a first inoperable, substantially linear configuration for insertion into and through a catheter to a desired portion of the vasculature to be treated, and a second operable,

coiled shape for filling and reinforcing the desired portion of the vasculature when the vasoocclusive device is implanted at the site in the vasculature to be treated; a second portion having a first inoperable, substantially linear configuration for insertion into and through a catheter to a desired portion of the vasculature to be treated, and a second operable, substantially helical coil shape for filling and reinforcing the desired portion of the vasculature when the vasoocclusive device is implanted at the site in the vasculature to be treated; wherein said at least one strand of a flexible material is a helical shape; wherein said at least one strand of a flexible material is a wire (see figures); wherein said flexible material comprises an alloy of titanium and nickel (col. 6, lines 59-60); wherein said flexible material comprises a metal selected from the group consisting of platinum, palladium, rhodium, gold, tungsten, and alloys thereof (col. 6, lines 65-67); wherein said vasoocclusive device is formed from at least one flexible strand of a resilient radiopaque material to provide a radiopaque marker of the deployed configuration of a device made of the strand during vascular surgery; wherein said radiopaque strand comprises an alloy selected from the group consisting of platinum, tungsten and gold (col. 6, line 65-67); wherein said at least one strand comprises a super-elastic material; wherein said super-elastic material comprises a nickel-titanium alloy (col. 6, lines 59-60); wherein said at least one strand comprises a shape memory material; wherein said shape memory material comprises a nickel-titanium alloy (col. 6, lines 59-60); wherein the anchor portion is formed to reinforce the vessel in the vicinity of the damaged portion of the vasculature to be treated; the second operable configuration having an anchor segment further comprises at least one extending loop,

the extending loop being curved about a longitudinal axis to form a hollow cylindrical circumferential pattern of loops about the longitudinal axis to provide a contact surface area to anchor the occluding portion of the device adjacent the artery system of the vasculature to be treated; wherein the second portion having a first inoperable, substantially linear configuration for insertion into and through a catheter to a desired portion of the vasculature to be treated, and a second operable configuration consisting of a coil segment further comprising, a coiled shape for filling and reinforcing the desired part of the vasculature when the vasoocclusive device is implanted at the site in the vasculature to be treated; the second portion having a first inoperable, substantially linear configuration for insertion into and through a catheter to a desired portion of the vasculature to be treated, and a and through a catheter to a desired portion of the vasculature to be treated, and a second operable, substantially spherical configuration for occluding at least a portion of said vasculature to be treated, said substantially spherical configuration having about 90% of said strand in about the outer 15% of the diameter of said substantially spherical configuration (see figures).

FIG. 1



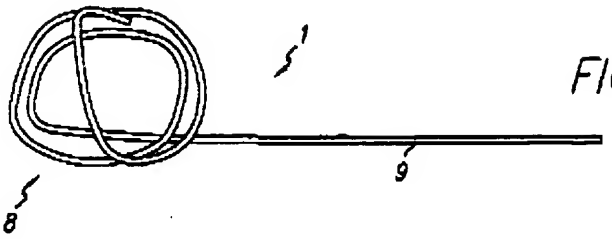


FIG. 2

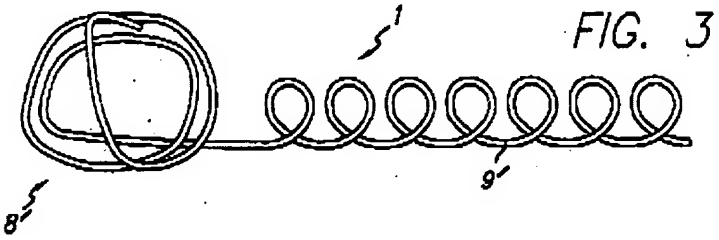


FIG. 3

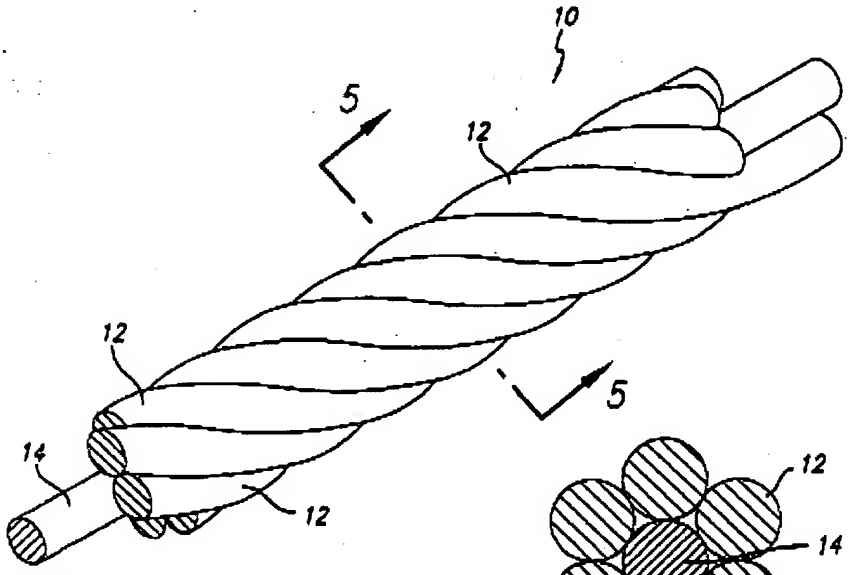


FIG. 4

FIG. 5

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 31-33, 37, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferrera et al. in view of Marks 5217484.

7. Ferrera et al. teaches the vasoocclusive device of claim 17. It should be noted that Ferrera et al. fails to teach an inner reinforcement member.

8. Marks teaches a device with a common inner reinforcement member for guidance of the device through a catheter. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the inner reinforcement member of Marks with the device of Ferrera to allow easy guidance of the vasoocclusive device through a catheter (col. 10, lines 39-49).

9. Claims 34 and 35 rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Ferrera/Marks as applied to claim 31 above, and further in view of Ken 5582619.

10. Ferrera/Marks teach the vasoocclusive device of claim 31. It should be noted that Ferrera/Marks fails to teach wherein the reinforcement member is coil shaped.

11. Ken teaches a device with a common coil shaped reinforcement member as alternate to a straight reinforcement member. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a coil shaped reinforcement member as an alternate to a straight reinforcement member because the coil shaped is a mere design choice and a mechanical expedient for reinforcing a vasoocclusive device.

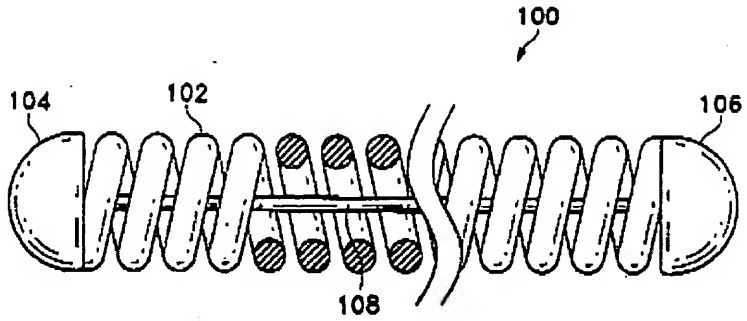


Fig. 1

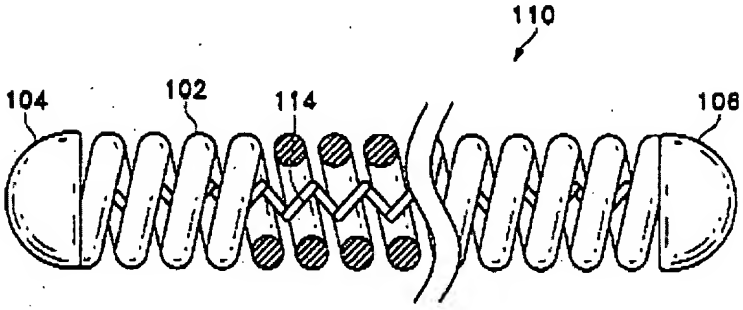


Fig. 2

Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael G. Mendoza whose telephone number is (571) 272-4698. The examiner can normally be reached on Mon.-Fri. 9:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hayes can be reached on (571) 272-4959. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MM

MICHAEL J. HAYES
SUPERVISORY PATENT EXAMINER